CLAIMS

What is claimed is:

1. A method for encoding video signals, comprising the steps of:

(a) receiving a progressive video bitstream comprising reference frames and non-reference frames, each having an initial temporal reference in accordance with an initial frame sequence structure;

(b) remapping the temporal references of the reference frames by ignoring the non-reference frames; and

(c) packetizing the reference frames with a base packet-identifier (PID) and the non-reference frames with an enhancement PID, to provide base and enhancement transport bitstreams, respectively.

2. The method of claim 1, further comprising the step of extracting and decoding, with an MP@ML decoder, only packets having the base PID, to provide an MP@ML decoded video bistream.

3. The method of claim 1, further comprising the step of extracting and decoding, with an MP@ML decoder, packets having both the base PID and the enhancement PID, to provide the base and enhancement bitstreams, and combining said bitstreams to provide an MP@HL decoded video bistream.

4. The method of claim 1, wherein said reference frames comprise I and P frames and said non-reference frames comprise B frames.

5. The method of claim 1, wherein step (b) comprises the step of remapping the temporal references of the reference frames so that the reference frames are consecutively numbered.

6. The method of claim 1, wherein each PID is a service channel identifier (SCID).

7. An apparatus for encoding video signals, comprising:

(a) a remapper for receiving a progressive video bitstream comprising reference frames and non-reference frames, each having an initial temporal reference in accordance with an initial frame sequence structure, and for remapping the temporal references of the only the reference frames by ignoring the non-reference frames; and

(b) a transport packetizer for packetizing the reference frames with a base packet-identifier (PID) and the non-reference frames with an enhancement PID, to provide base and enhancement transport bitstreams, respectively.

8. The apparatus of claim 7, further comprising an MP@ML decoder for extracting and decoding only packets having the base PID, to provide an MP@ML decoded video bistream.

9. The apparatus of claim 7, further comprising an MP@HL decoder for extracting and decoding, with an MP@ML decoder, packets having both the base PID and the enhancement PID, to provide the base and enhancement bitstreams, and for combining said bitstreams to provide an MP@HL decoded video bistream.

10. The apparatus of claim 7, wherein said reference frames comprise I and P frames and said non-reference frames comprise B frames.

11. The apparatus of claim 7, wherein the remapper remaps the temporal references of the reference frames so that the reference frames are consecutively numbered.

12. The apparatus of claim 7, wherein each PID is a service channel identifier (SCID).